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ARLINGTON, VA 22203				
EXAMINER				
KASHNIKOW, ERIK				
ART UNIT		PAPER NUMBER		
1794				
MAIL DATE		DELIVERY MODE		
12/24/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,117

Applicant(s)

THOMASSET ET AL.

Examiner

ERIK KASHNIKOV

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Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

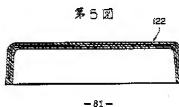
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

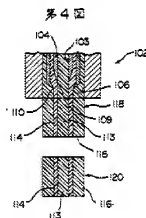
3. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi (JP 02098415).
4. In regards to claims 1, 4 and 5 and using an English translation of Kawaguchi which has been included with the office action, Kawaguchi teaches a multi layer object for use with compression molding, as well as the object formed from compression molding the original object (abstract and constitution as provided by Applicant's).

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Kawaguchi shows an embodiment in Figure 3A (reference number 20) in which the inside resin layer has a varied distance from the axis of symmetry, and the inner resin layer is surrounded by the outer resin layer. Kawaguchi et al. further state that the resin material, or dose, is deformed somewhat over time and gets a more spheroidized shape (page 11 lines 3-9) which as shown in Figure 3A results in a functional layer having a varied distance from the axis of symmetry. Examiner



points out that it is the outer edge of the functional layer which has a varying distance from the functional layer. Kawaguchi et al. are silent regarding the concentration of the various layers, however it has been shown that absent a showing of criticality with respect to "resin concentrations" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "resin concentrations" through routine experimentation to values, including those presently claimed in order to achieve "firm stable dose and multilayer container". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Figure 5 shows an article



wherein the article has an imprisoned inner layer. It is also obvious to vary the concentrations of the resins given that the first resin provides structure to the dose and the functional layers provide properties, i.e. gas barrier properties, to the dose (pages 8-9), it would have been obvious to one of ordinary skill in the art to choose amounts of

the first resin and the functional layer, including those presently claimed, depending on the desired properties of the dose. In regards to the limitation "for the realization of multilayer objects by compression molding" Kawaguchi et al. teach that the product is made by compression molding (claim 1).

5. In regards to claim 2 as seen from Figures 3A and 3B and page 11, given that the functional layer does have a varied axis of symmetry, given from the Figures it is clear that R_{max} is always greater than R_{min} and given that R_o is a constant in the formula, it is clear that the reference meets the ratio of claim 2. Alternatively, given that the outside functional layer imparts outstanding mechanical characteristics, it would have been obvious to one of ordinary skill in the art to control the ratio $(R_{min} - R_o)/(R_{max} - R_o)$ to values including those presently claimed in order that the functional resin is distributed throughout the object in order to produce object with effective and consistent mechanical properties.

6. In regards to claim 4, figure 4 shows an embodiment wherein there are two different inner layers.

7. In regards to claim 5, Kawaguchi et al. teach that the products of their invention are made by compression molding (claim1).

8. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (JP 02098415 in view of Akiyama (US 2002/0182351).

9. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and

the axis of symmetry. However they are silent regarding the functional resin being a layer comprising an adhesive layer / a barrier layer / an adhesive layer.

10. Akiyama et al. teach an article which has a barrier layer (the functional layer) embedded within (paragraph 0044 and Fig. 7). Akiyama et al. further teach that the barrier layer is actually a barrier layer in between two adhesive layers (paragraph 0106).

11. One of ordinary skill in the art at the time of the invention would be motivated to modify the article of Kawaguchi et al. with that of Akiyama et al. because the layer of Akiyama et al. offers firm adherence between the two films (paragraph 0061).

12. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al (JP 02098415) in view of Langecker (US 4,883,630).

13. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the process of cutting and adjusting the flow of the plastics.

14. Kawaguchi et al. teach that the layers are formed by the extrusion of the layers into a mold as well as a cutting step to form the dose (constitution as provided by Applicant's).

15. Langecker teaches a method for the making of a mold article comprised of a thermoplastic resin (column 1 lines 5-20) including embodiments wherein one layer surrounds the next layer (column 3 lines 62-64).

16. In regards to claim 6 and 7 Langecker teaches that rate of flow of the plastics into the mold can be varied. Langecker teaches that the optimum material distribution is taking place while the changing of the flow rates is going on (column 3 lines 42-64), one of ordinary skill in the art would recognize that to keep the optimum material distribution when the flow of one material is decreased the other has to be increased to make up the difference. Langecker also teaches phase opposition in claim 1 where it is taught that the resins are only injected one at a time, therefore when one is at full flow, the other is at no flow, and in a phase opposition.

17. In regards to claim 8 Langecker teaches a method which involves the injecting of at least one functional layer and at least on structural layer at different times in order to encapsulate one of the resins. Langecker also teaches the varying of the volume of the mold in proportion to the resin injected (claim 1).

18. While Kawaguchi et al. and Langecker are silent regarding pairing the cutting step with the variation in flow, it would have been obvious to one of ordinary skill in the art at the time of the invention to do this so that one obtains doses consistent in composition and interior design which would then lead to consistent articles made from said doses.

19. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Kawaguchi et al. with the process of Langecker because the process of Kawaguchi et al. would benefit from the confidence provided by the process of Langecker that an exact material distribution in the mold cavity is ensured (column 2 lines 59-64).

20. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawaguchi et al. (JP 02098415) in view of O'Mara (US 4,390,487)

21. As stated above Kawaguchi et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the process as well as flowing adjusting the flow of the plastics.

22. Kawaguchi et al. teach that the layers are formed by the extrusion of the layers into a mold and varying of the layers so that the inner layer is at different distances from the axis of symmetry (constitution as provided by Applicant's).

23. O'Mara teaches a process for making an outer layer of plastic around a core of plastic material (column 1 lines 5-10).

24. O'Mara teaches that this is accomplished by the injection of the inner plastic material into a core area of a previously formed plastic material (column 4 lines 19-63), after this is done the extruder is turned off and then the outer layer (conductive layer in the reference) is extruded over the opening to completely enclose the inner layer.

25. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Kawaguchi et al. with the process of O'Mara because the process of Kawaguchi et al. would benefit from the limiting of the handling of the device, and therefore saving money due to the less amount of work involved, as well as eliminate further steps which errors can be introduced (column 2 lines 20-25) of the process of O'Mara.

Response to Arguments

26. Applicant's arguments, see arguments, filed 09/11/08, with respect to the 35 U.S.C. 112 2nd paragraph rejections have been fully considered and are persuasive. The 112 2nd paragraph rejection of the claims has been withdrawn.

27. Applicant's arguments, see arguments, filed 09/11/08, with respect to the objection of the drawings have been fully considered and are persuasive. The objection of the drawings has been withdrawn.

28. The terminal disclaimer filed on 09/11/08 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/591,127 and 10/591,116 has been reviewed and is accepted. The terminal disclaimer has been recorded and as such the double patenting rejections have been withdrawn.

29. Examiner points out that the objection of the abstract still stands.

30. In response to Applicants arguments concerning the Kawaguchi reference not disclosing a variable distance, Examiner has included a translated copy of the reference and has amended the rejection to specifically point out where Kawaguchi et al. teaches a variable distance. Examiner points out that "nonpreferred disclosures can be used. A nonpreferred portion of a reference disclosure is just as significant as the preferred portion in assessing the patentability of claims." In re Nehrenberg, 280 F.2d 161, 126 USPQ 383 (CCPA 1960).

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31. In regards to Applicant's arguments that the objective of the claimed invention is not disclosed, it is noted that as all the claimed limitations are taught by the invention, the invention as taught by the references would intrinsically be able to preform the objectives of Applicant's invention.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached on (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow
Examiner
Art Unit 1794

/Callie E. Shosho/
Supervisory Patent Examiner, Art Unit 1794